



1998–99 CATS ASSESSMENT Open-Response Item Scoring Worksheet

Grade 5—Arts & Humanities

The **academic expectations** addressed by “Musical Instruments” are

1.14 Students make sense of ideas and communicate ideas with music.

2.23 Students analyze their own and others’ artistic products and performances using accepted standards.

The **core content** assessed by this item is

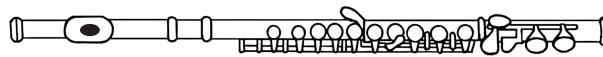
Music: Skills and Knowledge

Music Elements

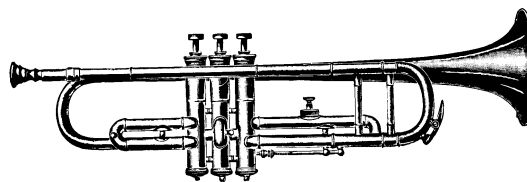
Timbre: sounds of voices and instruments, instrument families

Musical Instruments

Musical instruments have many similarities and many differences. Look at the two instruments below.



Flute



Trumpet

- Describe TWO ways the instruments above are ALIKE.
- Describe TWO ways the instruments above are DIFFERENT.



SCORING GUIDE

Grade 5 Arts & Humanities

Score	Description
4	Student clearly and accurately describes 2 ways the instruments are alike and 2 ways the instruments are different. Response includes relevant details.
3	Student generally describes 1 or 2 ways the instruments are alike and 1 or 2 ways the instruments are different (for a total of at least 3 comparisons).
2	Student provides a limited description of 1 or 2 ways the instruments are alike and/or 1 or 2 ways the instruments are different (for a total of at least two comparisons).
1	Student's response is minimal (e.g., student describes 1 similarity or 1 difference between the instruments).
0	Response is totally incorrect or irrelevant.
Blank	No response.

NOTE:

Clear and accurate description pertains to **specific** similarities/differences.

General description pertains to **general** similarities/differences.

Limited and minimal descriptions pertain to **vague** similarities/differences.

Some examples of similarities:

Made of metal; have round or button-like keys; music read in treble clef; mouth used to produce sound; smallest instrument in respective families; high voiced; basic shape is tubular

NOTE: No credit should be given for “both are musical instruments” or “both produce sounds.”

Some examples of differences:

trumpet: lips vibrate to produce sound; pitch in B flat; brass instruments; three valves; lips help make different tones; held in front to play; louder sound than a flute; metal tube is wound several times with a flared bell at end of tube

flute: lips blow across to produce sound; pitch in C; woodwind instrument; uses one thumb and eight fingers to make different pitches; held to side to play; softer sound than a trumpet; no flared bell; has levels to press as keys



ANNOTATED STUDENT RESPONSE

Grade 5 Arts & Humanities

Sample 4-Point Response of Student Work

Student Response

a. Two ways the flute and the trumpet are alike are (1) Both the flute and the trumpet have different keys you have to press while you are playing them. For example you press the keys to play different notes. (2) Another way they are alike is you have to blow into them. For example you have to blow into them to make the low or high pitched sound.

b. Two ways the two instruments are different are (1) The flute has several more keys to press than the trumpet. For example the flute has nine more keys than the trumpet. (2) Another way these instruments are different is you don't have to blow into the flute like you do the trumpet. For example you only have to blow over the mouthpiece of the flute to create the high sound it makes.

← Student clearly and accurately describes two specific ways the instruments are alike (i.e., both require pressing keys and blowing into them).

← Student clearly describes two specific ways the instruments are different (i.e., flute has more keys and you blow into the instruments differently). Response includes relevant details.

Overall, the student demonstrates a clear understanding of the differences and similarities of a trumpet and a flute as examples of the brass and woodwind families.



ANNOTATED STUDENT RESPONSE

Grade 5 Arts & Humanities

Sample 4-Point Response of Student Work

Student Response

Two ways these instruments are alike is first of all they're instruments so they produce a pleasing sound. That sound is made by blowing through each of the instruments and the sound comes from vibration. Also neither has a reed. They're also both played in band and orchestra.

They're different because when you look at a real trumpet and flute and compare them, you'll find that they are made of different materials. The flute is mostly made of silver and the trumpet is made of brass with a silver or gold coating because it is not healthy to be touching the brass with your mouth. Also the flute has keys and the trumpet does not. Its "keys" are actually called "valves."

These are the flute and trumpet's likenesses and differences.

← Student clearly and accurately describes two specific ways the instruments are alike (i.e., sound vibration and neither has a reed).

← Student describes two specific ways the instruments are different (i.e., different types of metals and the distinction between keys and valves). The response includes relevant details.

Overall, the student demonstrates a clear understanding of the differences and similarities of a trumpet and a flute as examples of the brass and woodwind families.

Sample 3-Point Response of Student Work

Student Response

a. I am going to describe two ways a flute and a trumpet are alike. One is you have to blow in them two is that they're chambers to open and close.

b. They're almost the same but one way they're different is they're in different families. The trumpet is brass and the flute woodwind. Second reason is they make different notes. I have told you two ways they're alike and different.

← Student describes two general ways the instruments are alike (i.e., "you have to blow in them" and both have chambers that open and close).

← Student describes one general way the instruments are different (i.e., brass and woodwind). Student offers a second difference which is incorrect (i.e., They make different notes). The total number of comparisons is three.

Overall, the student demonstrates a general understanding of the differences and similarities of a trumpet and a flute as examples of the brass and woodwind families.



ANNOTATED STUDENT RESPONSE

Grade 5 Arts & Humanities

Sample 2-Point Response of Student Work

Student Response

They are alike by having holes to blow through they both make noise.

One is bigger and the other is smaller. One makes a high pitch noise and one makes a low pitch noise.

← Student gives a limited description of one vague way the instruments are alike (i.e., “holes to blow through”).

← Student describes in a limited way two vague ways the instruments are different (i.e., size and pitch).

Overall, the student demonstrates a limited understanding of the differences and similarities of a trumpet and a flute as examples of the brass and woodwind families.

Sample 1-Point Response of Student Work

Student Response

A. Thay Both make very preety musek.

B. The flut makes slofter musei and the trumpet makes loud musk.

← Student gives an irrelevant similarity (i.e., both make pretty music).

← Student gives a minimal description of one vague way the instruments are different (i.e., trumpet is louder than a flute).

Overall, the student demonstrates minimal understanding of the differences and similarities of a trumpet and a flute as examples of the brass and woodwind families.



INSTRUCTIONAL STRATEGIES

Grade 5 Arts & Humanities

The open-response item **“Musical Instruments”** assesses students’ knowledge in the area of music. The item assesses students’ knowledge of the element of music called timbre (sound of voices and instruments, instrument families of brass, woodwind, string, and percussion). The question assesses understanding of instruments specifically in the brass and woodwind families. The instructional strategies below present ideas for helping students explore and master these concepts.

- Provide opportunities for students to listen to a variety of instrumental performances for each instrument family. Performances might be live, on film or video, and/or audio (tapes or compact disks). Discuss the kinds of sounds made by the instrument families. Have students listen and try to identify which type of instrument is playing.
- Provide opportunities for students to listen to guest speakers or class members explain (1) what is necessary to produce sounds on brass and woodwind instruments, (2) how instruments in the brass and woodwind families are held while they are played, and (3) the ways the keys and valves work on the instruments to change pitches (make different sounds).
- Provide illustrations of wind instruments from the brass and woodwind families. Have students compare the length and width (the distance the air must travel) from the mouthpiece to the end of each instrument. If real instruments are available, do this same activity with the students handling the instruments.
- Introduce the concept of sound being produced by vibration of the air passing through the instrument. If a string instrument (e.g., violin, banjo, ukulele, guitar) is available, have the students pluck one string and observe the vibration. If an instrument is not available, a cord or rubber band stretched tightly can be used to see the same kind of vibration. Discuss students’ ideas of how air can be set in vibration in the brass and woodwind families.
- Provide opportunities for students to experiment producing sounds on brass and woodwind instruments. If no actual instruments are available, students can explore (1) simulating playing a brass mouthpiece by “buzzing the lips” against the end of a thread spool, and (2) blowing into the end of a bottle to produce a flutelike sound.

(While this open response question does not assess reed instruments, students can explore the vibration of a reed in woodwinds like the clarinet and saxophone by blowing against the edges of two pieces of paper. Students may have their own “folk” instrument experiences to share such as blades of grass or comb/paper kazoos).

- Have students read about instruments common to bands and orchestras in the library and/or on the Internet.